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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,254	09/13/2005	Hendrikus Jan Kapaan	0470-052668	2475

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EXAMINER
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LE, DAVID D

ART UNIT	PAPER NUMBER
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3681

MAIL DATE	DELIVERY MODE
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05/23/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/549,254	<b>Applicant(s)</b> KAPAA ET AL.	
	<b>Examiner</b> David D. Le	<b>Art Unit</b> 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/10/06</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This is the first Office action on the merits of Application No. 10/549,254, filed on 13 September 2005. Claims 9-16 are pending.

### **Documents**

2. The following documents have been received and filed as part of the patent application:
  - Copy of Foreign Priority Document, received on 09/13/05
  - Information Disclosure Statement, received on 07/10/06

### ***Claim Objections***

3. Claims 11, 13 and 15 are objected to because of the following informalities:
  - Claim 11, lines 2-3, “one from the group of a friction screw, a ball screw and a roller screw mechanism” should be --one from the group consisting of a friction screw, a ball screw and a roller screw mechanism--.
  - Claim 13, line 4, “the satellite gear set” should be --the planetary gear set--.
  - Claim 15, line 3, “the satellite gear set” should be --the planetary gear set--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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**5. Claims 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 9:

- Lines 6-7 recite the limitation "the screw mechanism". There is insufficient antecedent basis for this limitation in the claim.
- Line 7 recites the limitation "the electric motor". There is insufficient antecedent basis for this limitation in the claim.

Claim 10:

- Line 2 recites the limitation "an electric/mechanical converter". It is unclear whether the claimed limitation should be construed as --an electric converter-- or as --a mechanical converter-- or as --an electric-mechanical converter--.

Claim 12:

- Line 5 recites the limitation "the ring gear". There is insufficient antecedent basis for this limitation in the claim.

Claim 13:

- Lines 1-2 recite the limitation "the screw of the screw mechanism". There is insufficient antecedent basis for this limitation in the claim.

- Line 4 recites the limitation "the sun gear". There is insufficient antecedent basis for this limitation in the claim.
- Lines 4-5 recite the limitation "the nut of the screw mechanism". There is insufficient antecedent basis for this limitation in the claim.

Claim 15:

- Line 2 recites the limitation "the sun wheel". There is insufficient antecedent basis for this limitation in the claim.

Claim 16:

- Lines 1-2 recite the limitation "the ball/screw mechanism". There is insufficient antecedent basis for this limitation in the claim.
- Lines 1-2 recite the limitation "the ball/screw mechanism". It is unclear whether the claimed limitation should be construed as --the ball screw mechanism-- or as --the ball mechanism-- or as --the screw mechanism--.
- Line 2 recites the limitation "an electric motor". It is unclear whether the newly recited limitation "an electric motor" is different from the one, which is first recited on line 7 of claim 9.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**7. Claims 9-11 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S.**

**Patent No. 5,735,767 to Forsyth (hereinafter referred to as Forsyth).**

*Claims 9-11 and 16:*

Forsyth (Figs. 1-5; column 1, line 66 – column 5, line 54) discloses a two-speed compounder comprising:

- A housing (i.e., Fig. 2, element 34);
- A rotatable input member (i.e., Fig. 2, element 26);
- A rotatable output member (i.e., Fig. 2, element 54);
- A planetary gear set (i.e., Fig. 2, element 22);
- A selector means (i.e., Fig. 2, element 70);
- Wherein the selector means are driveable by means of an electric actuator (i.e., Fig. 2, element 138);
- Wherein each satellite gear (i.e., Fig. 2, element 44) of the planetary gear set (22) is rotatably connected with respect to the housing (34);
- Wherein the housing supports a screw mechanism (i.e., Fig. 2, element 162) and an electric motor (i.e., Fig. 2, element 176);
- Wherein the electric actuator (138) comprises an electric-mechanical converter for converting rotational motion into linear motion (i.e., Fig. 2);
- Wherein the screw mechanism is a ball screw mechanism (i.e., Fig. 2); and

- Wherein the ball screw mechanism is operatively connected to the electric motor (176).

### *Allowable Subject Matter*

8. Claims 12-15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### *Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Somschor et al. (U. S. Patent Application Publication No. US 2004/0254040 A1) teaches an electromechanical actuator, as shown in Figs. 4-5.
- Eckert (U. S. Patent No. 6,605,019) teaches a switching device for a two-stage planetary gear, as shown in Fig. 1.
- Bader et al. (U. S. Patent No. 6,267,215) teaches a clutch mechanism, as shown in Fig. 1.
- Breen (U. S. Patent No. 6,149,543) teaches a compounder assembly, as shown in Fig. 1.
- Adam et al. (U. S. Patent No. 5,503,603) teaches a two-speed differential, as shown in Fig. 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 571-272-7092. The examiner can normally be reached on Mon-Fri (0900-1730).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David D. Le/  
Primary Examiner, Art Unit 3681  
05/21/2008

ddl